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Generation of quantum entangled photons from lithium niobate nonlocal metasurfaces

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We report the first experimental generation of spatially entangled photon pairs from a metasurface incorporating a lithium niobate nonlinear thin film and the preparation of polarisation entangled states with a metasurface integrating two crossed metagratings.

Primary authors: MA, Jinyong (Research School of Physics, The Australian National University, Canberra, ACT 2601, Australia); ZHANG, Jihua; PARRY, Matthew; CAI, Marcus; CAMACHO MORALES, Rocio (The Australian National University); XU, Lei (Advanced Optics and Photonics Laboratory, Department of Engineering, School of Science and Technology, Nottingham Trent University, Nottingham NG11 8NS, United Kingdom); Prof. NESHEV, Dragomir (Australian National University); SUKHORUKOV, Andrey

Presenter: MA, Jinyong (Research School of Physics, The Australian National University, Canberra, ACT 2601, Australia)

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